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Please find below and/or attached an Office communication concerning this application or proceeding.

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**BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES**

Application Number: 10/822,444
Filing Date: April 12, 2004
Appellant(s): BERAN ET AL.

John D. Veldhuis-Kroeze
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed 08/11/2008 appealing from the Office action mailed 12/10/2007.

(1) Real Party in Interest

A statement identifying by name the real party in interest is contained in the brief.

(2) Related Appeals and Interferences

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The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

(3) Status of Claims

The statement of the status of claims contained in the brief is correct.

(4) Status of Amendments After Final

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

(5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is correct.

(6) Grounds of Rejection to be Reviewed on Appeal

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

(7) Claims Appendix

The copy of the appealed claims contained in the Appendix to the brief is correct.

(8) Evidence Relied Upon

5627979

Chang et al.

06-1997

(9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Claims 1-31 are rejected under 35 U.S.C. 102(b) as being anticipated by Chang et al. (5627979).

Re claim 1, Chang et al. discloses a method of constructing a representation of an object having at least one property, the method comprising:

identifying at least one property group associated with the object which has been chosen to represent the object (employee 1910 group, see figure 19 for example), at least one property of the object belonging to each property group associated with the object (Salary Employee 1920 and regular employee 1930, see figure 19 for example) ;

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identifying any other object that the object references within a property of an identified property group (mapping person class into employee table, see figure 16 for example);

retrieving data corresponding to each of the properties belonging to the at least one property group (user clicks on the Select Tables item 1120 which displays a listbox to select the Employee table, see column 13 lines 26-28 for example);

storing the retrieved data on a tangible computer storage medium (see column 7 lines 7-9, column 9 lines 2-4 and figure 1 for example); and

representing the object using the retrieved data (representation for accessing objects from a data store, see column 6 line 15 for example).

Re claim 2, Chang et al. discloses a method, wherein the step of representing the object further comprises visually representing the object by displaying the retrieved data (using Smart Schema, see column 5 lines 35-38 and column 7 lines 17-20 for example).

Re claim 3, Chang et al. discloses a method, wherein the step of displaying the retrieved data further comprises displaying names of properties belonging to the at least one property group adjacent values of those properties (see figures 16 and 19 for example).

Re claim 4, Chang et al. discloses a method, wherein displaying names of properties belonging to the at least one property group further comprises displaying a name of each property group adjacent the names of the properties belonging to that property group and adjacent the values of those properties (see figures 16 and 19 for example).

Re claim 5, Chang et al. discloses a method, wherein representing the object using the retrieved data further comprises representing the object using its own property groups and the ones of its parent (see figure 25 and column 16 lines 18-25 for example).

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Re claim 6, Chang et al. discloses a method, wherein at least one object inheritance hierarchy exist between the object and the other identified objects, and wherein each property group is unique to a particular object inheritance hierarchy (see column 16 lines 18-25 for example).

Re claim 7, Chang et al. discloses a method, wherein the object is a specialization of a second object, and wherein the object inherits the property groups associated with the second object (see figures 19 and 24 for example).

Re claim 8, Chang et al. discloses a method, wherein for each property group, properties belonging to the property group include at least one property of the object and one or more properties of only one other object (see figure 24 for example).

Re claim 9, Chang et al. discloses a method, wherein for at least one property group, the step of retrieving data corresponding to each of the properties belonging to the property group further comprises retrieving the data corresponding to properties of the object and to properties of the only one other object associated with the property group (see figures 19, 24 and 25 for example).

Re claim 10, Chang et al. discloses a method, wherein identifying the at least one property group associated with the object further comprises identifying a default property group associated with the object (see column 16 lines 2-6 for example).

Re claim 11, Chang et al. discloses a method of constructing representations of objects each having at least one property, the method comprising: associating property groups with objects in a data base, each property group associated with an object including at least one property of the object; storing the property groups in the database; and for each of a plurality of objects in the database, specifying which property groups are to be used in representing the object (see figure 19 and abstract for example); and for each of the plurality of objects in the database, storing on a tangible computer storage medium the specification

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of a property groups for use in generating a user interface representing the object (see column 7 lines 7-9 and column 9 lines 2-4 for example).

Re claim 12, Chang et al. discloses a method, wherein object inheritance hierarchies exist between some of the plurality of objects in the database, wherein the step of associating property groups with objects further comprises associating property groups with objects such that each property group is unique to a particular object inheritance hierarchy (see column 16 lines 20-30 for example).

Re claim 13, Chang et al. discloses a method, wherein the step of associating property groups with objects in the data base further comprises associating property groups with objects in the database such that at least one of the property groups is associated with two objects such that properties of the two objects belong to the property group (see figure 19, 24 and 25 for example).

Re claim 14, Chang et al. discloses a method, and for constructing a representation of a particular object having at least one property, the method further comprising: identifying at least one property group associated with the object which has been chosen to represent the object, at least one property of the object belonging to each property group associated with the object; identifying any other object that the object references within a property of an identified property group; retrieving data corresponding to each of the properties belonging to the at least one property group; and representing the object using the retrieved data to generate a user interface (see figures 16, 19 and abstract for example).

Re claim 15, Chang et al. discloses a method, wherein the step of representing the object further comprises visually representing the object by displaying the retrieved data (see column 5 lines 35-38, column 7 lines 12-20 for example).

Re claim 16, Chang et al. discloses a method, wherein the step of displaying the retrieved data further comprises displaying names of properties belonging to the at least one property group adjacent values of those properties (see figures 16 and 19 for example).

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Re claim 17, Chang et al. discloses a method, wherein displaying names of properties belonging to the at least one property group further comprises displaying a name of each property group adjacent the names of the properties belonging to that property group and adjacent the values of those properties (see figures 16 and 19 for example).

Re claim 18, Chang et al. discloses a method, wherein at least one object inheritance hierarchy exist between the object and the other identified objects (see column 16 lines 18-25 for example).

Re claim 19, Chang et al. discloses a method, wherein the object is a specialization of a second object, and wherein the object inherits the property groups associated with the second object (see figures 19 and 24 for example).

Re claim 20, Chang et al. discloses a method, wherein for each property group, properties belonging to the property group include at least one property of the object and one or more properties of only one other object (see figure 24 for example).

Re claim 21, Chang et al. discloses a method, wherein for at least one property group, the step of retrieving data corresponding to each of the properties belonging to the property group further comprises retrieving the data corresponding to properties of the object and to properties of the only one other object associated with the property group (see figures 19, 24 and 25 for example).

Re claim 22, Chang et al. discloses an object representation system for constructing a representation of an object having at least one property, the system comprising: an object database storing data for populating instances of the object; an object definition database storing object definition data which defines properties of the object, and storing at least one property group associated with the object; and a processor (compiles, see column 9 lines 33-35, and using computer, see column 9 lines 2-4 for example) configured to implement an object representation engine, the engine configured to generate a user

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interface representation of the object using at least one property group stored in the object definition database (see figures 16, 19 and abstract for example).

Re claim 23, Chang et al. discloses a system, wherein the engine is configured to generate the representation of the object by implementing the steps comprising: identifying at least one property group associated with the object which has been chosen to represent the object, at least one property of the object belonging to each property group associated with the object; identifying any other object that the object references within a property of an identified property group; retrieving data corresponding to each of the properties belonging to the at least one property group; and representing the object using the retrieved data to generate the user interface representation of the object (see figures 16 and 19 for example).

Re claim 24, Chang et al. discloses a system, wherein the step of representing the object further comprises visually representing the object by displaying the retrieved data (see column 5 lines 35-38, column 7 lines 17-20 for example).

Re claim 25, Chang et al. discloses a system, wherein the step of displaying the retrieved data further comprises displaying names of properties belonging to the at least one property group adjacent values of those properties (see figures 16 and 19 for example).

Re claim 26, Chang et al. discloses a system, wherein displaying names of properties belonging to the at least one property group further comprises displaying a name of each property group adjacent the names of the properties belonging to that property group and adjacent the values of those properties (see figures 16 and 19 for example).

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Re claim 27, Chang et al. discloses a system, wherein at least one object inheritance hierarchy exist between the object and the other identified objects, and wherein each property group is unique to a particular object inheritance hierarchy (see column 16 lines 18-25 for example).

Re claim 28, Chang et al. discloses a system, wherein the object is a specialization of a second object, and wherein the object inherits the property groups associated with the second object (see figures 19 and 24 for example).

Re claim 29, Chang et al. discloses a system, wherein for each property group, properties belonging to the property group include at least one property of the object and one or more properties of only one other object (see figures 24 for example).

Re claim 30, Chang et al. discloses a system, wherein for at least one property group, the step of retrieving data corresponding to each of the properties belonging to the property group further comprises retrieving the data corresponding to properties of the object and to properties of the only one other object associated with the property group (see figures 19, 24 and 25 for example).

Re claim 31, Chang et al. discloses a system, wherein identifying the at least one property group associated with the object further comprises identifying a default property group associated with the object (see column 16 lines 2-6 for example).


(10) Response to Argument

Appellant's arguments have been fully considered but are not persuasive. Examiner reiterates that references to specific columns, figures or lines should not be limiting in any way. The entire reference provides disclosure related to the claimed invention. Appellant argues:

1. Whether claims 1-10 are unpatentable under 35 U.S.C. § 102(b) as being anticipated by Chang et al., U.S. Patent No. 5,627,979 (hereafter referred to as "Chang").

First, in contrast to the assertion made by the Examiner, there is no teaching in Chang that the name "Employee" is a property group having properties. Instead, "Employee" is a name of the table 1910. See Chang at col. 14, lines 54-55. A name of a table is not a property group (page 7, antepenultimate paragraph).

Examiner disagrees.

Appellant simply concludes "a name of a table is not a property group" without explaining what a property group is and how it is differentiated from a name of a table. As one of ordinary skill in the art would understand, the "Employee" table, which is an object, inherently contains several properties, such as for example, a name (i.e., "Employee"), associated classes ("SalaryEmp" and "RegularEmp"), even an icon . As such, the "Employee" table may be reasonably thought of as a collection of properties, or a property group.

Second, even if "Employee" represented a property group (there is no teaching in Chang to suggest it does), there is also no teaching that at least one property of the object belongs to such a property group. While the Office Action cites items SalaryEmp 1920 and RegularEmp 1930 from figure 19 of Chang as being properties in the supposed property group "Employee", Chang does not support such an interpretation. Instead, Chang describes items 1920 and 1930 as being two classes to which the table 1910 is to be mapped. See Chang at col. 14, lines 52-56. Lacking a teaching or suggestion of this first step recited in independent claim 1, claims 1-10 cannot be anticipated by Chang (page 7, penultimate paragraph).

Examiner disagrees.

As acknowledged by Appellant, Chang describes items 1920 and 1930 as being two classes to which the table 1910 is to be mapped. By virtue of being mapped to the Employee table, which is an object, the two classes clearly are clearly "associated with the object." Thus, it is clear that Chang teaches

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"at least one property of the object belonging to each property group (e.g., Regular Employee 1920 and Regular Employee 1930) associated with the object (e.g., the Employee table)".

Third, since Chang does not teach property groups as required by independent claim 1, Chang also cannot teach or suggest the steps of "identifying any other object that the object references within a property of an identified property group." Chang does not support the interpretation set forth in the Office Action that this step is taught in figure 16 of that patent by mapping a person class into an employee table. Additionally, this interpretation is inconsistent with the interpretation applied in the Office Action regarding the claim limitation "identifying at least one property group associated with the object which has been chosen to represent the object, at least one property of the object belonging to each property group associated with the object." There, the Office Action used the mapping of Employee table 1910 to classes 1920 and 1930 (referring to FIG. 19 of Chang) as representing the required claim limitation of properties associated with a property group. In contrast, the Office Action now cites the mapping of a table 1060 to Person class 1070 in FIG. 16 as representing the required identification of any other object that the object references within a property of an identified property group. It appears to be inconsistent to consider classes to which a table is mapped to be both properties of a property group and objects referenced within a property of an identified property group, and it is thus respectfully maintained that Chang does not teach or suggest the limitation of "identifying any other object that the object references within a property of an identified property group." Lacking a teaching or suggestion of this claim limitation, Chang cannot anticipate claims 1-10 (page 7, last paragraph).

Examiner disagrees.

It is not inconsistent to consider classes to which a table is mapped to be both properties of a property group and objects referenced within a property of an identified property group. After all, the classes mentioned have objects as their properties, for example, their icons. Thus, it is entirely reasonable to consider classes to which a table is mapped to be both properties of a property group and objects referenced within a property of an identified property group, at least because the classes

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mentioned reference icon objects and mapping those classes to a table inherently maps the classes' icon objects to the table as well.

Fourth, while Chang teaches that icons representing tables can be displayed via such a pulldown menu selection process, it does not teach "retrieving data corresponding to each of the properties belonging to the at least one property group." Similarly, the text surrounding col. 6, line 15, which was referenced by the Office Action as teaching "representing the object by using the retrieved data to generate a user interface," does not actually teach it (page 8, last paragraph).

Examiner disagrees.

As Appellant acknowledges, Chang teaches that icons representing tables can be displayed via a pulldown menu selection process. Inherently, those icons and table names would be "retrieved data corresponding to each of the properties belonging to the at least one" object. As stated above, an object, such as the Employee table, is a property group. Thus, Chang clearly teaches "retrieving data corresponding to each of the properties belonging to the at least one property group." Further, Fig. 12 of



Chang clearly displays an Employee table name and an icon . Clearly then, Chang teaches "representing the object by using the retrieved data to generate a user interface."


2. Whether claims 11-21 are unpatentable under 35 U.S.C. § 102(b) as being anticipated by Chang.

As discussed with reference to claim 1, Chang provides no teaching of property groups as used in the context of independent claim 11 and the present application. As such, Chang provides no teaching of the claim limitation of "associating property groups with objects in a data base, each property group associated with an object including at least one property of the object." Chang also provides no teaching of, for each of a plurality of objects in the database, "specifying which property groups are to be used in representing the object." Lacking a teaching of these claim limitations from independent claim 11, claims

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11-21 cannot be anticipated by Chang. It is respectfully requested that the rejection of claims 11-21 be reversed (page 10, last paragraph).

Examiner disagrees.

Appellant merely provides conclusory statements which do not attack the merits of the rejection. As stated above, the "Employee" table, which is an object, inherently contains several properties, such as for example, a name (i.e., "Employee"), associated classes ("SalaryEmp" and "RegularEmp"), even an icon . As such, the "Employee" table may be reasonably thought of as a collection of properties, or a property group. Thus, Appellant's premise is incorrect.

3. Whether claims 22-31 are unpatentable under 35 U.S.C. § 102(b) as being anticipated by Chang.


The interpretations of Chang applied by the Examiner are respectfully traversed. Chang provides no teaching of property groups as used in the context of independent claim 22 and the present application. As such, Chang provides no teaching of the claim limitation of "an object definition database storing object definition data which defines properties of the object, and storing at least one property group associated with the object." (Emphasis added). Chang also does not teach a "processor configured to implement an object representation engine, the engine configured to generate a user interface representation of the object using at least one property group stored in the object definition database." (Emphasis added). Lacking a teaching of these claim limitations from independent claim 22, claims 22-31 cannot be anticipated by Chang. Consequently, it is respectfully requested that the rejection of claims 22-31 be reversed by the Board (page 12, first paragraph).

Examiner disagrees.

Appellant again merely provides conclusory statements which do not attack the merits of the rejection. As stated above, the "Employee" table, which is an object, inherently contains several properties, such as for example, a name (i.e., "Employee"), associated classes ("SalaryEmp" and

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"RegularEmp"), even an icon . As such, the "Employee" table may be reasonably thought of as a collection of properties, or a property group. Thus, Appellant's premise is incorrect. As one of ordinary skill in the art would readily recognize, to be able to display the Employee table mapped with two classes, as shown in fig. 19, there would be an inherent need for "an object definition database storing object definition data (e.g., storing the definition of an Employee table object) which defines properties of the object (e.g., defines what the name, associated icon, associated classes of the Employee table object), and storing at least one property group associated with the object (e.g., storing the information related to the Employee table." Further, Chang (fig. 19) clearly teaches "processor configured to implement an object representation engine, the engine configured to generate a user interface representation of the object using at least one property group stored in the object definition database" (e.g., a processor and associated software generating a GUI representation of the Employee table object using the table's associated property group as stored in a database).

(11) Related Proceeding(s) Appendix

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

/Jordany Núñez/
Examiner, Art Unit 2175 (10/13/2008)

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